HD

# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/888,040 | 06/23/2001 | George W. Thompson | 123499-1000 | 7502 |

34725        7590        05/23/2007

CHALKER FLORES, LLP
2711 LBJ FRWY
Suite 1036
DALLAS, TX 75234

| EXAMINER |
|---|
| GRAHAM, CLEMENT B |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3692 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 05/23/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/888,040 | THOMPSON, GEORGE W. |
| | Examiner | Art Unit | |
| | Clement B. Graham | 3692 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on <u>*26 February 2007*</u>.

2a) ☐ This action is **FINAL**.    2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) <u>*1-40*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>*1-40*</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All  b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

---

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .. ·

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-40, remain pending in this application.

### *Claim Rejections - 35 USC § 103*

3.    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Khemlani et al

(Hereinafter Khemlani U.S Patent 6, 772, 146) in view of Kemp, II et al (Hereinafter

Kemp, II U.S Patent 6, 772,132).

As per claim 1,  Khemlani discloses a method of displaying trading trends for an

investment comprising the steps of .receiving an opening value and a closing value for

the investment for two or more time intervals;

calculating an opening value trend using a market trend indicator and the opening values

for the investment (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines

12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) calculating a closing value

trend using the market trend indicator and the closing values for the investment(see

column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10

lines 1-67 and column 20 lines 1-65).

Khemlani fail to explicitly teach displaying a visual favorable/unfavorable trade indicator

comparing the opening value trend to the closing value trend for the investment.

However Kemp, II discloses FIG. 2 illustrates a screen display of an invention

described Click Based Trading with Market Depth Display the contents of which are

incorporated herein by reference. This display shows the inside market and the market

depth of a given commodity being traded. Row 1 represents the "inside market" for the

commodity being traded which is the best (highest) bid price and quantity and the best

(lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the

commodity being traded. In the preferred embodiment of the present invention, the

display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market--row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market. (see column 3 lines 53-63 and column 5 lines 10-65 and column 6 lines 1-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Khemlani to include displaying a visual favorable/unfavorable trade indicator comparing the opening value trend to the closing value trend for the investment taught by Kemp, II in order to display and analyze the fluctuations of trading values or prices.

As per claim 2, Khemlani discloses wherein the opening value is an opening price and the closing value is a closing price. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 3, Khemlani discloses wherein the opening value is an opening trading volume and the closing value is a closing volume. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 4, Khemlani discloses wherein the visual favorable/unfavorable trade indicator is a first color whenever the closing value trend is greater than the opening value trend. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 5, Khemlani discloses wherein the first color is green. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 6, Khemlani discloses wherein the visual favorable/unfavorable trade indicator is second color whenever the closing value trend is lower than the opening value trend. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 7, Khemlani discloses wherein the second color is red. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 8,  Khemlani discloses wherein the visual favorable/unfavorable trade indicator displays the time  interval. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 9,  Khemlani discloses further comprising the step of displaying the opening value trend as a first line and the closing value trend as a second line in a graph. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 10,  Khemlani discloses further comprising the step of displaying a list of information about a point selected on either the first line or the second line. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 11,  Khemlani discloses wherein the market trend indicator comprises one or  more regression algorithms selected from: stochastics, relative strength. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

(see column 1 lines 35-67 and column 2 lines 1-49 and column 3 lines 24-51 and directional movement, commodity channel, simple average, exponential average weighted average,  MACD (simple), MACD (exponential), momentum/ROC, midrange, William's %R, parabolic stop, volatility stop, trailing stop, high low stop. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

Bollinger Bands, Keltner Channel, uniform channel, regression channel, swing lines, cycle forecast, on balance volume, overlay chart, point & figure, moving average, moving linear regression, upper envelope, lower envelope, %K, %D, %D slow, %D averaged, %R, RSI, momentum, acceleration, moving average oscillator, moving average momentum, moving average convergence-divergence oscillator, moving average convergence-divergence (see column 1 lines 55-67 and column 2 lines 1-21 and column

4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) MACD signal line, commodity channel index, rate of change in prices, on balance volume variance, standard deviation, volatility ratio, volatility, skew, kurtosis, Williams Accumulated Distribution, Arm's Ease of Movement, plus directional indicator, minus directional indicator, directional movement and average directional movement. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 12, Khemlani discloses wherein the opening value trend is calculated without using the opening value from the most recent time interval. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 13, Khemlani discloses further comprising the steps of  .
selecting a market information source;
communicably connecting to the market information source; and selecting the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 14, Khemlani discloses  further comprising the step of executing a trade involving the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 15,  Khemlani discloses further comprising the step of simulating an execution of a trade involving the investment(see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 16, Khemlani discloses further comprising the step of calculating a potential tax liability for an execution of a trade involving the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 17,  Khemlani discloses further comprising the step of searching for one or more investment trading opportunities based on one or more search criteria. (see

column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 18, Khemlani discloses further comprising the step of selecting the time interval. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 19, Khemlani discloses wherein the time interval is a preset time based on a user profile. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 20, Khemlani discloses further comprising the step of repeating the steps of receiving the opening value and the closing value, calculating the opening value trend and the closing value trend, and displaying the visual indicator for a set of different time intervals. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 21, Khemlani discloses wherein the set of different time intervals comprises fifteen minutes, thirty minutes, one hour, ninety minutes and two hours. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 22, Khemlani discloses wherein the set of different time intervals comprises one day, one week and one month. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 23, Khemlani discloses further comprising the step of repeating the steps of receiving the opening value and the closing value, calculating the opening value trend and the closing value trend, and displaying the visual indicator for two or more investments. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 24, Khemlani discloses further comprising the step of updating the opening a values, the closing values, the opening value trend, the closing value trend and the visual indicator. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 25, Khemlani discloses further comprising the step of signaling a user whenever the visual indicator changes. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 26, Khemlani discloses a computer program embodied in a computer readable medium for displaying trading trends for an investment:

a code segment for receiving an opening value and a closing value for the investment for two or more time intervals;

a code segment for calculating an opening value trend using a market trend indicator and the opening values for the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) code segment for calculating a closing value trend using the market trend indicator and the closing values for the investment.. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65). Khemlani fail to explicitly teach and a code segment for displaying a visual favorable/unfavorable trade indicator based on a comparison of the the opening value trend to the closing value trend for the investment.

However Kemp, II discloses FIG. 2 illustrates a screen display of an invention described Click Based Trading with Market Depth Display the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row 1 represents the "inside market" for the commodity being traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market--row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market. (see column 3 lines 53-63 and column 5 lines 10-65 and column 6 lines 1-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Khemlani to include and a code segment for displaying a visual favorable/unfavorable trade indicator based on a comparison of the the opening value trend to the closing value trend for the investment taught by Kemp, II in order to display and analyze the fluctuations of trading values or prices.

As per claim 27, Khemlani discloses further comprising a code segment for displaying the opening value trend as a first line and the closing value trend as a second line in a graph. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 28, Khemlani discloses further comprising a code segment for displaying a list of information about a point selected on either the first line or the second line. in a graph. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 29, Khemlani discloses wherein the market trend indicator comprises one or more regression algorithms selected from: stochasties, relative strength, directional movement, commodity channel, simple average, exponential average weighted average, MACD (simple), MACD (exponential), momentum/ROC, midrange(see column 1 lines 35-67 and column 2 lines 1-49 and column 3 lines 24-51 and column 3 column 5 lines 11-43 and column 4 lines 19-34) William's %R, parabolic stop, volatility stop, trailing stop, high low stop, Bollinger Bands, Keltner Channel, uniform channel, regression channel, swing lines, cycle forecast, on balance volume, overlay chart, point & figure, moving average, moving linear regression, upper envelope, lower envelope, %K, %D, %D slow, %D averaged, %R, RSI, momentum, acceleration, moving average oscillator, moving average momentum(see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) moving average convergence-divergence oscillator, moving average convergence-divergence, MACD signal line, commodity channel index, rate of change in prices(see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) on balance volume variance, standard deviation, volatility ratio, volatility, skew, kurtosis, Williams Accumulated Distribution, Arm's Ease of Movement,

plus directional indicator, minus directional indicator, directional movement and average directional movement. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 30, Khemlani discloses further comprising:

a code segment for selecting a market information source;

a code segment for communicably connecting to the market information source; and a code segment for selecting the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 31 Khemlani discloses further comprising a code segment for 2 executing a trade involving the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

A per claim 32, Khemlani discloses further comprising a code segment for simulating an execution of a trade involving the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 33, Khemlani discloses further comprising a code segment for calculating a potential tax liability for an execution of a trade involving the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 34, Khemlani discloses further comprising a code segment for searching for one or more investment trading opportunities based on one or more search criteria. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 35, Khemlani discloses further comprising a code segment for selecting the time interval. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 36, Khemlani discloses further comprising a code segment for repeating the steps of receiving the opening value and the closing value, calculating the opening value trend and the closing value trend, and displaying the visual indicator for a

set of different time intervals. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 37, Khemlani discloses further comprising a code segment for repeating the steps of receiving the opening value and the closing value, calculating the opening value trend and the closing value trend, and displaying the visual indicator for two or more investments. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 38, Khemlani discloses further comprising a code segment for updating the opening values, the closing values, the opening value trend, the closing value trend and the visual indicator. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 39, Khemlani discloses further comprising a code segment for signaling a user whenever the visual indicator changes. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

As per claim 40, Khemlani discloses an apparatus for displaying trading trends for an investment comprising:
a computer communicably connected to a market information source;
a display communicably connected to the computer; and the computer receiving an opening value and a closing value for the investment for two or more time intervals from the market information source. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) calculating an opening value trend using a market trend indicator and the opening values for the investment(see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65) calculating a closing value trend using the market trend indicator and the closing values for the investment. (see column 1 lines 55-67 and column 2 lines 1-21 and column 4 lines 12-67 and column 5-10 lines 1-67 and column 20 lines 1-65).

Khemlani fail to explicitly teach and displaying a visual/unfavorable trade indicator based on a comparison of the opening value trend to closing value trend for the investment on display.

However Kemp, II discloses FIG. 2 illustrates a screen display of an invention described Click Based Trading with Market Depth Display the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row 1 represents the "inside market" for the commodity being traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market--row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market. (see column 3 lines 53-63 and column 5 lines 10-65 and column 6 lines 1-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Khemlani to include displaying a visual/unfavorable trade indicator based on a comparison of the opening value trend to closing value trend for the investment on display taught by Kemp, II in order to display and analyze the fluctuations of trading values or prices.

## Conclusion

## Response to Arguments

4.      Applicant's arguments files on 02/26/07 have been fully considered but they are moot in view of new grounds of rejections.

5.      In response to Applicant's arguments that Khemlani fail to teach or suggest" Khemlani

6.      Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


CG

April 29, 2007
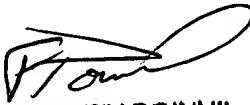
FRANTZY POINVIL
PRIMARY EXAMINER
AU 3692